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In the Supreme Court of the United States

OCTOBER TERM, 1998

UNITED STATES OF AMERICA, PETITIONER

v.

HUGHES AIRCRAFT COMPANY

ON PETITION FOR A WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT

REPLY BRIEF FOR THE UNITED STATES

SETH P. WAXMAN
Solicitor General
Counsel of Record
Department of Justice
Washington, D.C. 20530-0001
(202) 514-2217

1198

TABLE OF AUTHORITIES

Cases: Page

Exhibit Supply Co. v. *Ace Patents Corp.*, 315 U.S. 126 (1942) 3

Hilton Davis Chem. Co. v. *Warner-Jenkinson Co.*, 62 F.3d 1512 (Fed. Cir. 1995) 5

Hughes Aircraft Co. v. *United States (Hughes V)*, 640 F.2d 1193 (Ct. Cl. 1980) 8-9

Litton Sys., Inc. v. *Honeywell, Inc.*, 140 F.3d 1449 (Fed. Cir. 1998) 1, 2, 10

Smith v. *Magic City Kennel Club, Inc.*, 282 U.S. 784 (1931) 3-4

Warner-Jenkinson Co. v. *Hilton Davis Chemical Co.*, 520 U.S. 17 (1997) 1, 2, 3, 4, 5, 8, 9, 10

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Respondent characterizes the Federal Circuit's ruiing in this case as a routine application of this Court's decision in *Warner-Jenkinson Co.* v. *Hilton Davis Chemical Co.*, 520 U.S. 17 (1997). See Br. in Opp. 1. The Federal Circuit, however, views the matter differently. The members of that court are deeply divided on how to apply this Court's directions respecting the doctrine of equivalents when elements of patent claims are amended for reasons of patentability. See Pet. App. 212a-214a (Clevenger, J., joined by Gajarsa, J., dissenting from the denial of rehearing en banc); *id.* at 261a-276a (Plager, J., Clevenger, J., and Gajarsa, J., separately dissenting from the denial of rehearing en banc in *Litton Sys., Inc.* v. *Honeywell, Inc.*, 140 F.3d 1449 (Fed. Cir. 1998)). As Judge Clevenger stated, "The question posed by the United States in this case is of utmost importance to patent

law. A swift answer to the question is needed." Pet. App. 214a. The government's petition presents an appropriate occasion for the Court to provide that answer.[1]

1. This Court's decision in *Warner-Jenkinson Co.* v. *Hilton Davis Chemical Co.*, 520 U.S. 17 (1997), states that, if a patent applicant adds a limiting element to a patent claim for "a substantial reason related to patentability," such as to overcome the prior art, then "prosecution history estoppel would *bar* the application of the doctrine of equivalents as to that element." *Id.* at 33 (emphasis added). As Judges Clevenger and Gajarsa explain, the Court's directions are unambiguous: if the patent applicant restricts the patent claim to overcome prior art, then the doctrine of prosecution history estoppel precludes the applicant from asserting an infringement based on the doctrine of equivalents with respect to the added elements, and the patent applicant must rely on the literal terms of the restricting amendment to prove the infringement. See Pet. App. 262a-263a, 269a (Clevenger, J. and Gajarsa, J., separately dissenting from denial of rehearing en banc in *Litton*).[2]

In this case, respondent has conceded that Williams (the applicant for respondent's patent) added paragraphs e, f and

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[1] Contrary to respondent's suggestion (Br. in Opp. 13), this case is an especially appropriate vehicle for resolving the issue. Although there have been lengthy proceedings below, those proceedings have served to narrow and focus the issue. That issue is squarely presented and (unlike the court of appeals' interlocutory decision in *Litton*) the case is ripe for review now. Furthermore, a decision to await another case will subject the public to a significant and unwarranted damage award.

[2] Respondent states that "the Federal Circuit has consistently held that the mere fact that an amendment was made following a prior art rejection does not end the inquiry." Br. in Opp. 26. No one argues, however, that the timing of the amendment ends the inquiry. Rather, *Warner-Jenkinson* holds that when the purpose of an amendment is to overcome the prior art, prosecution history estoppel bars resort to the doctrine of equivalents with respect to the added elements.

g to his claims to overcome the Patent and Trademark Office's (PTO's) rejection of his initial patent application. See Pet. App. 14a. In amending his claims, Williams specifically stated that "[t]hese claims were re-written . . . so that the claims more clearly distinguish[ed]" the prior art, which "does not teach or suggest the elements and relationships set out in" paragraphs e, f and g. *Id.* at 105a. The court of appeals nevertheless held, with respect to these amendments, that the prosecution history of the Williams patent serves only "to narrow the range of equivalents" and not to "preclude all equivalents available to" respondent. *Id.* at 14a. That holding rests in square conflict with this Court's direction in *Warner-Jenkinson*, and it demonstrates the need for this Court's review.

Respondent nevertheless defends the court of appeals' ruling by arguing that not all of the limitations contained in paragraphs e, f and g were necessary to distinguish the McLean patent and that respondent should be held to have surrendered only those limitations that were essential for that purpose. Br. in Opp. 5, 16-18. That argument, however, is contrary both to this Court's longstanding precedents and to *Warner-Jenkinson*. As this Court explained in *Exhibit Supply Co.* v. *Ace Patents Corp.*, 315 U.S. 126, 136 (1942), a patent applicant who amends his claim to avoid the prior art, "proclaim[s] his abandonment of all that is embraced in that difference" between his broader and narrower claims. It is undisputed that Williams's original claims encompassed the government's S/E satellites, but the PTO disallowed those broad claims on the basis of the prior art. Pet. 19-20. Williams then narrowed his claims by adding paragraphs e, f and g. It does not matter, for purposes of prosecution history estoppel, whether Williams could have narrowed his claims in some less restrictive manner. Williams chose those limitations, and respondent is "estopped to claim the benefit of his rejected claim or such a construction of his amended

claim as would be equivalent thereto." *Smith* v. *Magic City Kennel Club, Inc.*, 282 U.S. 784, 790 (1931).

Respondent seeks to narrow the scope of what was surrendered through amendment by framing the issue, in effect, as whether the amended claim could have been rewritten in a way that would have avoided claims that encompassed the prior art but still encompassed the accused device. *Warner-Jenkinson* explicitly forecloses that approach:

> We do not suggest that, where a change is made to overcome an objection based on the prior art, a court is free to review the correctness of that objection when deciding whether to apply prosecution history estoppel. As petitioner rightly notes, such concerns are properly addressed on direct appeal from the denial of a patent, and will not be revisited in an infringement action. *Smith* v. *Magic City Kennel Club, Inc.*, *supra*, at 789-790. What *is* permissible for a court to explore is the reason (right or wrong) for the objection and the manner in which the amendment addressed and avoided the objection.

520 U.S. at 33 n.7. Here, the PTO rejected the initial Williams application based on the prior art. Williams addressed and overcame that objection by adding the whole of paragraphs e, f and g.

Warner-Jenkinson teaches that, once a court concludes that the patent applicant amended the claims to avoid prior art, it is simply not appropriate for the court to pick and choose what claim limitations were actually needed to accomplish that objective. Yet respondent urges, and the court of appeals adopted, precisely that approach. Respondent contends (Br. in Opp. 16-17, 20-21) that the court of appeals was entitled to characterize the Williams limitations as "essential" or "not essential" with a view toward distinguishing the prior art but encompassing the accused S/E satellites. Such rewriting of patent claims was the very

abuse of the doctrine of equivalents that this Court expressly corrected in *Warner-Jenkinson*. Respondent's approach would give the doctrine of equivalents "a life of its own, unbounded by the patent claims" and undermine "the definitional and public-notice functions of the statutory claiming requirement." 520 U.S. at 28-29.

This Court's decision in *Warner-Jenkinson* sets a different course. The Court endorsed Judge Nies's view that "the courts have no right to enlarge a patent beyond the scope of its claims as allowed by the Patent Office." 520 U.S. at 29 (quoting *Hilton Davis Chem. Co.* v. *Warner-Jenkinson Co.*, 62 F.3d 1512, 1574 (Fed. Cir. 1995) (dissenting opinion)). Those same considerations require (as this Court recognized in its above-quoted footnote, 520 U.S. at 33 n.7) that a court apply prosecution history estoppel based upon the actual amendment as written by the applicant and allowed by the PTO, and not upon a subsequent parsing of the amendment aimed at separating its "essential" limitations from its "not essential" limitations. The appropriate outcome of this case under *Warner-Jenkinson* is clear: Because Williams added paragraphs e, f and g to overcome the prior art, prosecution history estoppel bars respondent from utilizing the doctrine of equivalents to enlarge the scope of the patent to encompass devices, such as the government's S/E satellites, that are outside the literal terms of those limiting amendments.

2. Even if this Court were to relax its directions for applying prosecution history estoppel, it should not endorse the approach that the court of appeals followed in this case. The court below held that prosecution history estoppel "narrow[ed] the range of equivalents" respondent could assert, but that respondent "did not surrender subject matter covering a device, such as the [government's] accused device, which provides two-way communication with an external location * * * and which uses an external coordinate

system." Pet. App. 14a. Although the court did not fully articulate its rationale, it apparently shared respondent's view that prosecution history estoppel limits the doctrine of equivalents with respect to only those elements of its limiting amendments that a reviewing court decides, in retrospect, were truly necessary to overcome the prior art.

As this case shows, that theory, which requires the court to cull out the "essential" features of a claim amendment, encourages the parties to ignore the precise terms of the claim amendment and undertake, instead, to rewrite the prosecution history. Here, the prior art that Williams's amendment sought to overcome was not limited to a single patent. The examiner rejected Williams's broader claims as unpatentable because of obviousness "over the newly cited patent to McLean * * * in view of a previously cited patent to Geyling." Pet. App. 28a. The McLean patent had disclosed a spin-stabilized, target-seeking space vehicle with a jet motor on its periphery that automatically precessed the vehicle to keep its spin access pointing toward its target. Pet. 4. The Geyling patent disclosed a radio communications satellite with remotely controlled gas jets for spinning the satellite and aligning and correcting its orbit. Finding of Fact No. 95, *reprinted in* No. 96-1297 Pet. App. 319a.

Williams thus drafted his claim amendments to overcome not only the McLean patent, see Pet. App. 13a-14a, but also the Geyling patent. In amending his claim, Williams stated that Geyling "does not teach or suggest the use of control signals synchronized with an indication of the instantaneous spin angle position of the satellite." C.A. Supp. J.A. 2000.[3] To distinguish Geyling, Williams cited paragraph f of his amendment ("and means disposed on said body for receiving

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[3] "C.A. Supp. J.A." refers to the Supplemental Joint Appendix filed in the court of appeals on remand from this Court's 1997 order.

from said location control signals synchronized with said indication"). *Id.* at 2001. That limitation equally distinguishes the government's S/E satellites as well because the ground control signals are not synchronized with the satellite's spin cycle. Pet. App. 79a.

Indeed, the elements of paragraphs e, f and g that respondent and the court of appeals now view as "essential" were not the novel elements of Williams's invention that made it patentable. The first element cited by the court below was the satellite's "two-way communication with an external location," that is, a ground control station. Pet. App. 14a. Two-way communication between earth and a satellite, however, was not invented by Williams, as the Geyling patent shows. Respondent attempts to overcome that problem by narrowing the two-way communication to "a means for receiving control signals to activate the precession jet." Br. in Opp. 17. But Geyling also described even that more specific type of communication. Instead, the new element that Williams added was, as he himself stated in making the amendment, the limitation added by paragraph f: "the use of control signals synchronized with an indication of the instantaneous spin angle position of the satellite." C.A. Supp. J.A. 2000. The government's S/E satellites do not utilize those synchronized control signals, but instead rely on a different technology. Pet. App. 131a-133a.

Similarly, the second "essential" element cited by the court below, use of "an external coordinate system" (Pet. App. 14a), was not new. Respondent points specifically to Williams's use of "a V-beam sun sensor" as the essential innovation. Br. in Opp. 3. See also *id.* at 17. The sun sensor that respondent used, however, "was well known in the art at the time of the Williams invention." Pet. App. 21a. The novel elements added by Williams were those described and limited by paragraphs e, f and g, which allow a ground control station to control the orientation of a satellite by

receiving an indication of the satellite's instantaneous spin angle with respect to an external coordinate system and then to communicate commands to pulse precession jets on the satellite synchronized precisely with its spin cycle. The government's S/E system does not perform the function of orienting satellites in that way or with those elements. *Id.* at 70a, 74a-76a.

Thus, the specific portions of Williams's limiting amendments in paragraphs e, f and g that respondent and the court below now cite as "essential" are not the elements of the patent claim that were novel and thus essential to its patentability. The court of appeals' misconceived approach is likely to produce similar anomalies by creating incentives for the parties to characterize the plain terms of their claims amendments, in retrospect, as merely "not essential" verbiage.

3. Moreover, even if prosecution history estoppel did not apply here, a proper application of the doctrine of equivalents, applied element-by-element as *Warner-Jenkinson* requires, would preclude a finding of infringement. As we have explained, the novel, and thus patentable, claims of the Williams invention are those precisely described and limited by paragraphs e, f and g—and not the broader claims that the PTO disallowed or that respondent now characterizes as "essential." The trial court found (Pet. App. 70a, 74a-76a) that those elements of the Williams patent are not found, either literally or by equivalence, in the government's S/E satellites. The trial court's findings on that issue are controlling unless clearly erroneous. As Judge Davis explained in dissent in *Hughes VII* (*id.* at 131a-135a), and as Judge Nies explained in dissent in *Hughes XIII* (*id.* at 207a), the trial court's decision was correct.[4]

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[4] Respondent seeks to dismiss Judge Davis's dissent by noting that a ground control device is not part of the Williams patent. Br. in Opp. 16 n.3. Although *Hughes V* held that "the Williams application sought a patent upon a satellite and a satellite only," the court also noted that

To be sure, as respondent states (Br. in Opp. 14), the court below has three times reached the opposite conclusion and held that there was infringement by equivalents. Each of those decisions, however, suffers from a fundamental flaw. The divided panel in *Hughes VII* relied on an erroneous legal standard, the now discredited invention-as-a-whole test. The divided panel in *Hughes XIII* perpetuated that error by applying the law-of-the-case doctrine. And the panel in *Hughes XV* not only misconceived *Warner-Jenkinson* (pp. 2-3, *supra*) but also declined to consider the government's challenge to the improper appellate fact-finding in *Hughes VII*. See Pet. 21-24.[5]

The proper scope of the judicially created doctrine of equivalents is at issue "in virtually every case involving pat-

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paragraphs e, f and g refer to a control "location external to" the satellite and added, "some external control device is essential to the operation of the Williams attitude control system." *Hughes Aircraft Co.* v. *United States*, 640 F.2d 1193, 1195, 1197 (Ct. Cl. 1980). Thus, respondent's point is immaterial. The key point made by Judges Davis and Nies is one respondent does not attempt to rebut: Williams's satellite, unlike the government's S/E satellites, sends an indication of its instantaneous spin angle to an external location, and based upon those data, the external location transmits back command signals synchronized with the satellite's spin cycle to fire the precession jets at a time precisely determined at the external location.

[5] Contrary to respondent's contention (Br. in Opp. 27-28), the government preserved the issue of improper appellate fact-finding in its 1994 appeal. That issue was included both in the questions presented (whether "the trial court's finding of noninfringement" in *Hughes VI* should be affirmed) and in the argument ("[i]nfringement under the doctrine of equivalents is a determination of fact, and it is not to be disturbed unless clearly erroneous," and the *Hughes VII* "majority did not hold that any of the trial court's factual findings were clearly erroneous"). Brief for Defendant/Cross-Appellant United States at 2, 51, 52, *Hughes Aircraft Co.* v. *United States (Hughes XIII)*, 86 F.3d 1566 (Fed. Cir. 1996) (Nos. 94-5149 and 95-5001). See also Reply Brief for Defendant Cross-Appellant United States at 22, *Hughes XIII* (Nos. 94-5149 and 95-5001).

ent enforcement." Pet. App. 261a (Plager, J., dissenting from the denial of rehearing en banc in *Litton Sys., Inc.* v. *Honeywell, Inc.*, 140 F.3d 1449 (Fed. Cir. 1998)). The numerous cases applying *Warner-Jenkinson* cited by respondent (Br. in Opp. 25) attest to the importance of that issue. Because the decision below conflicts with "the blunt and clear words" of *Warner-Jenkinson*, the petition presents a matter "of utmost importance to patent law." Pet. App. 212a, 214a (Clevenger, J., dissenting from the denial of rehearing en banc). The issues raised here are fundamental and oft-recurring, and they should be decided now.

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For the foregoing reasons, and those set forth in the petition, the petition for a writ of certiorari should be granted.

Respectfully submitted.

SETH P. WAXMAN
Solicitor General

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